

SCOPE OF SERVICES

This is a retainer contract and task orders for individual districts will be issued. Each District Bridge Inspection and Maintenance Supervisor will determine which bridges the divers will inspect. Multiple task orders may be issued simultaneously.

Qualification statements shall include unit prices for inspecting and reporting on a submerged bridge element at a Level I and a separate price at a Level II. All elements will be inspected at a Level I inspection, with the exception of steel elements. Steel elements shall be inspected at a Level II inspection. DOTD will apply the unit prices to the mix of substructures of candidate structures to determine the proposed total cost. The price quoted is to be all-inclusive for a routine inspection (personnel, equipment, and travel) with paper and electronic reports as described below. The project manager will negotiate separate prices for additional work with the selected Consultant/Team. Items to be negotiated are considered to be relatively minor compared to the total scope of the project, but significant and essential. These items include; additional per unit cost for Level II inspection of a Level I substructure unit, additional cost for a Level III inspection of a Level I or a Level II substructure unit, and the cost to remove debris that interferes with an inspection.

The inspections will be element based (PONTIS) and the condition states shall be those defined for submerged elements defined in the LADOTD PONTIS Inspection Manual (2007 version). The selected Consultant /Team will be capable of conducting inspection simultaneously in at least three Districts. Surface supplied divers are the standard for this type of work. Any other type effort the Consultant/Team proposes will include thorough justification. Each DOTD District will provide at least one bridge inspector who will monitor and may direct the inspections and will provide quality assurance for DOTD. The District will evaluate findings that appear to have a significant structural impact on the bridge, following normal DOTD bridge inspection procedures. Specifically, the Consultant/Team is to perform the following activities for each bridge indicated by the project manager.

Concrete Elements: Conduct a Level I inspection for all components that are in more than four feet of water. Only minimal cleaning to remove marine growth is to be done. The inspection is to rely on visual and tactile examination of the exterior of the underwater structure. Attention should be concentrated at the mud line, mean low water areas, and any areas of damage. Any accumulated debris should be noted. The inspection is intended to detect obvious, structurally significant damage. Particular attention should be paid to cracks in prestressed concrete piles. Elements generally expected to fall into this category are:

- 226 *“Pile-Submerged/Below Grade - Prestressed Concrete”*
- 227 *“Pile-Submerged/Below Grade - Reinforced Concrete”*
- 215 *“Abutment - Concrete”*
- 220 *“Cap/Footings-Submerged/Below Grade - Concrete”*
- 204 *“Pile Extension/Column – Prestressed Concrete”*
- 205 *“Pile Extension/Column – Reinforced Concrete”*

Any problems that may be identified may be further evaluated with a Level II inspection upon successful negotiations.

Timber Elements: Conduct a Level I inspection of all components that are in more than four feet of water. Only minimal cleaning to remove marine growth is to be done. The inspection is to rely on visual and tactile examination of the exterior of the underwater structure. Attention should be concentrated at the mud line, mean low water areas, and any areas of damage. Any accumulated debris should be noted. The inspection is intended to detect obvious, structurally significant damage. Elements generally expected to fall into this category are:

- 228 *“Pile-Submerged/Below Grade - Timber”*
- 216 *“Abutment – Timber”*

Any problems that may be identified may be further evaluated with a Level II inspection upon successful negotiations.

Steel Elements: Conduct a Level II inspection of all components that are in more than four feet of water. Marine growth is to be cleaned from the structure to enable close inspection. Cleaning is expensive and is to be restricted to sample areas, those being ten inch wide bands at the splash zone and mud line and at five foot intervals between, if the unit is in sufficiently deep water. Simple instruments, such as calipers and rulers are to be used, although ultrasonic thickness gauges may be used. Elements generally expected to fall into this category are:

- 225 *“Pile-Submerged/Below Grade - Steel”*

Any problems that may be identified may be evaluated with a Level III inspection upon successful negotiations.

All Units: An electronic report is to be prepared that will include the following data:

- a. Identification of bridge.
- b. Very brief summary describing the findings of the inspection with particular emphasis on needed work (if any), urgency of such work, and the need for any further inspections.
- c. Points substructure unit ratings, as applicable. Ratings are design to be associated with quantities of elements in each condition state. For substructure units, the unit of measure is “each”, intended to be each pile, for example.
- d. Photographs that depict any significant deviations from as-built conditions.

Element definitions and condition states for elements listed above are included in the Appendix as an example of LADOTD’s Element Inspection format. Further detail and example photos are included in the PONTIS Inspection Manual 2007 Edition.

All Units With An Increased Level Of Inspection: A paper report is to be prepared that will include the following data:

- a. Same data as in the electronic file.

- b. Sketches that depict any significant deviations from as-built conditions.

PONTIS Elements For Underwater Inspections: There are PONTIS substructure elements that may require reporting. Elements are to be coded only if the element currently is and usually is in at least four feet of water.

The report will contain PONTIS element numbers and associated ratings for each element inspected. The Louisiana PONTIS reference manual can be requested via email from Project Manager.

EVALUATION CRITERIA

The general criteria to be used by DOTD (when applicable) in evaluating responses for the selection of a Consultant to perform these services are:

1. Consultant's firm experience on similar projects, weighting factor of 3;
2. Consultant's personnel experience on similar projects, weighting factor of 4;
3. Consultant's firm size as related to the estimated project cost, weighting factor of 3;
4. Consultant's past performance on similar DOTD projects, weighting factor of 6;**
5. Consultant's current work load, weighting factor of 5;
6. Location where the work will be performed, weighting factor of 4. *
7. Consultant's proposed unit costs, weighting factor of 5;

*All respondents will receive a 4 for this category.

**All respondents will receive a 4 for this category.

Consultants will be evaluated as indicated in Items 1- 7. The evaluation will be by means of a point-based rating system. Each of the above criteria will receive a rating on a scale of 0-4. Then the rating will be multiplied by the corresponding weighting factor. The proposal with the lowest proposed cost (Item 7) will receive a rating of 4. All others will receive a rating of 4, multiplied by the ratio of the lowest proposed cost to the proposed cost. The firm's ratings in each category will then be added to arrive at the Consultant's final rating.

If Sub-Consultants are used, each member of the Consultant/Team will be evaluated on their part of the contract, proportional to the amount of their work. The individual team member ratings will then be added to arrive at the Consultant/Team rating.

DOTD's Consultant Evaluation Committee will be responsible for performing the above described evaluation, and presenting a short list of the three (if three are qualified) highest rated Consultants to the Secretary of the DOTD. The Secretary will make the final selection.